

REMARKS

Claims 2-19 are pending in this application. Claims 4, 7, 11, 12 and 14-16 are presently withdrawn. By this Amendment, claim 1 is canceled in favor of new independent claim 17, and the dependency of claims dependent from canceled claim 1 has been revised. New dependent claims 18 and 19 have been added.

No new matter is added. For example, with respect to claim 18, the specification supports claim 18 in that it describes that the additive may comprise up to 5% by weight of the coating material. The fluoropolymer-based material is thus indicated to comprise up to 95% by weight of the coating material. The specification further identifies PTFE as being a desirable fluoropolymer-based material. As such, clearly overall the specification adequately conveys possession of the concept of a composition comprising fluoropolymer in an amount of at least about 95% by weight of the coating material.

In view of the foregoing amendments and the following remarks, reconsideration of the application is respectfully requested.

I. Rejection Under 35 U.S.C. §112, second paragraph

Claims 1-3, 5, 6, 8 and 13 were rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is respectfully traversed with respect to the amended claims.

The Patent Office asserts that the metes and bounds of the terms "substituted" or "substituents" are indefinite because the polyimide is to be "essentially free from heteroatoms or heteroatomic groups other than -S- and other than the imide groups." Applicants disagree.

The specification of the present application describes the following possible substituents: halogens such as fluorine or chlorine; lower alkyls such as methyl, ethyl, n-propyl, isopropyl; and lower haloalkyls such as fluoroalkyls (see page 6, lines 11-15).

Further, in the nomenclature of organic chemistry, a heteroatom is any atom that is not carbon or hydrogen (typically, but not exclusively, fluorine, chlorine, oxygen, sulfur) and a heteroatomic group is a group containing at least one heteroatom. Thus, substituents, which are optionally present on the aryl groups of the polyimide in the present composition, may comprise heteroatoms or heteroatomic groups. The polyimide is not required to be totally free of heteroatoms or heteroatomic groups, but is to be "essentially free from heteroatoms" as recited in claim 17. Thus, claim 17 does not exclude the polyimide used in the composition from containing minor amounts of heteroatoms or heteroatomic groups.

Therefore, the metes and bounds of the terms "substituted" or "substituents" are definite. For the foregoing reasons, Applicants submit that the claims are definite. Reconsideration and withdrawal of this rejection are respectfully requested.

II. Rejection Under 35 U.S.C. §102/§103

Claims 1-3, 5, 6, 8-10 and 13 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 6,548,188 (hereinafter Yanase). The rejection is respectfully traversed with respect to the amended claims.

Independent claim 17 recites a composition comprising a fluoropolymer-based coating material including an additive in an amount of from 0.5% to 5% by weight of the coating material of at least one polyimide comprising repeating units which include at least one group Ar-X-Ar', in which Ar and Ar' represent independently an optionally substituted monovalent or divalent aryl group and X represents a -CO- or -S- group, the said polyimide being essentially free from heteroatoms or heteroatomic groups other than -S- and other than the imide groups, and wherein the composition is laser markable.

The Patent Office asserts that Yanase discloses the resin composition of the recited claim of the present application in that it discloses both the types of materials and contents

thereof (see Table 7, Example 11). The Office Action appears to suggest that the resin composition disclosed in Yanase would inherently meet all the characteristics of the claimed invention. However, applicants strongly disagree, in that unlike the composition of claim 17, Yanase does not teach a composition to be laser markable.

Yanase discloses a resin composition comprising at least PTFE and polyimide resin, but only highlights properties of heat resistance and wear resistance of the obtained resin. Thus, Yanase has no such teaching as to a laser markable composition as does the present application.

Furthermore, none of the elements disclosed in Yanase would suggest to one of ordinary skill in the art, faced with the problem of improving laser markability, to use a PTFE-based resin composition comprising aromatic polyimide resins. In fact, Yanase dissuades such practitioner, in that unfavorable results and drawbacks for wear resistance are obtained using PTFE-based resin compositions comprising singly an aromatic polyimide resin as compared to other compositions in Yanase (see Table 10). Yanase teaches the need to add barium sulfate and phosphate in relatively high proportions in the resin composition (representing at least 6% by weight and more preferably 25% by weight of the composition) in order to improve the properties of heat resistance and wear resistance.

Therefore, the composition of claim 17 is not anticipated by, and would not have been obvious over, Yanase. Claims 2-3, 5-6, 8-10 and 13, which depend from claim 17, are also patentable over Yanase for at least the same reasons as claim 17.

Likewise, Yanase does not teach or suggest the composition of claim 18. Claim 18 recites a composition according to claim 17, comprising fluoropolymer in an amount of at least 95% by weight of the coating material. Yanase only discloses a fluoropolymer resin between 50 to 93% by weight. In the specification, Yanase provides examples teaching compositions containing only 62 to 80% by weight of fluoropolymer (see Tables 5-9).

Because Yanase does not teach a composition including at least 95% by weight of PTFE, claim 18 is also not anticipated by Yanase.

For the foregoing reasons, Applicants submit that Yanase does not teach or suggest claims 2-19. Reconsideration and withdrawal of this rejection are respectfully requested.

III. Rejoinder

Applicants submit that upon allowance of the claims, claims 4, 7, 11, 12 and 14-16 should be rejoined with the application and similarly allowed.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 2-19 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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